PATENT

Dkt No. 1827.030

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Before the Board of Patent Appeals and Interferences

Appellants:	Thomas P. Adams et al.		
Appeal No. :			
Appl. No.:	10/821,004	Examiner:	J. Shapiro
Filed:	July 22, 2004	Art Unit:	3653
For:	MACHINE AND METHOD FOR CASH RECYCLING AND CASH SETTLEMENT		

APPELLANTS' BRIEF ON APPEAL

Board of Patent Appeals and Interferences
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants, Thomas P. Adams et al., having filed a timely Notice of Appeal hereby submit this Brief on Appeal. This Brief is submitted under the current BPAI Rules in 37 C.F.R. §41.37 that were first issued in 2004.

I. REAL PARTY IN INTEREST

The real party in interest is the owner of record, Talaris Inc., which has an office at 705 S. Twelfth Street, Watertown, Wisconsin, 53094. Talaris Inc. is affiliated with Talaris Holdings Ltd., having an office in Basingstoke, Hampshire, United Kingdom, which is turn is affiliated with the Carlyle Group, having an office at 1001 Pennsylvania Ave. NW, Washington DC 20004.

II. RELATED APPEALS AND INTERFERENCES

This appeal is related to the pending appeal in U.S. Pat. Appl. No. 10/896,472 in that the technologies are related and in that the Examiner has made a provisional double patenting rejection in the final action of December 24, 2008, para. 10, in U.S. Pat. Appl. No. 10/896,472 based on this application. (This action is found in Appendix C.)

III. STATUS OF CLAIMS

Claims 1-9, 11-21 and 23-29 have been finally rejected in an Office action of May 7, 2009, and this rejection is appealed for claims 1-9, 11-21 and 23-29. Claims 10 and 22 have been withdrawn from the examination, but are subject to rejoinder if generic claims are allowed in this application. The claims and their status are set forth in Appendix A hereto.

IV. STATUS OF AMENDMENTS

All amendments have been entered.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

References to the drawings and paragraphs of the specification herein are based on U.S. Pat. Pub. No. US2004/0231956 A1, the published version of Appl. No. 10/821,004. Support is also provided by original claims 1-27.

The support cited herein is by way of example from the specification and drawings, and not by way of limitation.

A. RELATION OF INDEPENDENT CLAIM 1 TO THE DRAWINGS AND DESCRIPTION.

1. A coin recycling machine (10) for receiving coins (para. 0034, second sentience), for sorting coins into a plurality of denominations (para. 0034, third sentence) and for automatically dispensing coins as a plurality of sorted denominations (Abstract, third sentence) to an individual receptacle (15, Fig. 2) associated with a respective user and

having compartments (16, Fig. 2) for receiving and holding respective denominations (para. 0057, first sentence), the machine (10) comprising: a housing (11) (paragraph 0033, first sentence);

an intake area (19) on the housing (11) configured for receiving batches of unsorted coins which are dumped into the machine by the user (para. 0034, second sentence) from the individual receptacle (para. 0008) (15, Fig. 2) having compartments (16, Fig. 2) for holding respective denominations;

a sorting mechanism (21) for receiving the batches of coins loaded into the machine (10) and sorting the coins into a plurality of denominations (paras. 0033, 0034);

a plurality of dispensing hoppers (46, 47, 48, 49, Figs. 2, 4 and 6) for holding the coins by denomination in unstacked piles by denomination (para. 0037, fourth sentence), the dispensing hoppers having respective exits (Figs. 2, 3, 4; 50, 51, 52, 52) (para. 0037, sixth sentence) positioned for dispensing to an individual receptacle (15, para. 0037) having compartments (16) for receiving and holding respective denominations (para. 0057, first sentence);

a plurality of bulk coin storage receptacles (31, 32, 33, 34, Figs. 3 and 5) positioned for receiving the coins from the sorting mechanism and holding the coins in unstacked piles (para. 0038) by denomination for transfer to the dispensing hoppers (para. 0037);

coin transfer mechanisms (Figs. 6-9; 73, para. 0041) for transferring coins from the bulk coin storage receptacle(s) (31, 32, 33, 34, Figs. 3 and 5) to the dispensing hoppers (Figs. 2, 3, 4; 50, 51, 52, 52);

an input device (24, Figs. 1, 12) for transferring inputs from a user to associate the user with a batch of coins being loaded into the machine (Fig. 13, block 103, para. 0050 last sentence- para. 0051, fifth sentence) from the individual receptacle and to associate the user with coins being

dispensed to the user (Fig. 16, block 136; paragraph 0059) in an individual receptacle having compartments for holding respective denominations (para. 0057, first sentence); and

a controller (80, Fig. 12) electronically connected to the input device (24, Fig. 12) and to the sorter (91, Fig. 11) for calculating first totals for amounts of coins received through the intake area and associated with the user (Abstract, fourth sentence; paragraph 0059), the controller (80) also being electrically connected to the dispensing hoppers (46, 47, 48, 49, Fig. 2; see also Fig. 11) for automatically dispensing coins to the individual receptacle (15) associated with the user (Abstract, third sentence) and having compartments (16) for receiving and holding respective denominations (para. 0057, first sentence, original claim 11), without manual manipulation of the bulk coin storage receptacles (para. 0037, fourth sentence) and accumulating second totals (para. 0057 last sentence) for coins being dispensed and for making available the first and second totals associated with the user for comparison (original claim 1, blocks 102, 103, 104, Fig. 13, para. 0051); and

wherein the controller (80) associates inputs from a plurality of users with cash balances of coins dispensed and received for respective users during their respective work shifts (block 105, Fig. 13, para 0051).

NOTE:

Claim 1 provides for three receptacles operating in series for flowing multiple denominations (e.g., pennies, nickels, dimes, etc.) which, for a non-gravity machine, are: 1) the bulk coin storage receptacles (31, 32, 33, 34, Figs. 3 and 5), 2) the dispensing hoppers (46, 47, 48, 49, Fig. 2) and 3) an individual receptacle (15, Fig. 2) associated with a respective user and having compartments (16, Fig. 2) for receiving and holding respective denominations. The individual receptacle (15) completes the cycle by

being the receptacle from which coins are dumped into the machine as claimed in claim 1, lines 9-13 above.

In a gravity-type machine illustrated in Fig. 10, the bulk storage receptacles (31, 32, 33, 34, Figs. 3 and 5) are replaced by gravity feed hoppers 93 seen in Fig. 10 and the dispensing hoppers 46 are similar to dispensing hoppers in Figs. 3 and 5, except that they are positioned immediately below the gravity feed hoppers 93. So, again as disclosed, there are three receptacles operating in series for receiving and dispensing each denomination with the third receiving receptacle being the cash drawer 15.

B. RELATION OF INDEPENDENT CLAIM 18 TO THE DRAWINGS AND DESCRIPTION

18. A method of recycling coins, comprising:

dispensing coins by denomination from a plurality of dispensing hoppers in a machine to a user coin receptacle having compartments for receiving respective denominations and totaling amounts dispensed in relation to respective users ; (paras. 0037, 0057, entirety)

loading batches of coins having a plurality of denominations into the machine from the user coin receptacle (paras. 0008, 00059) and totaling amounts of the batches of coins in relation to respective users (paras. 0008, 0009, 0034, 0059, entirety);

receiving the coins that are fed into the machine and sorting said coins by denomination, counting said coins and directing said coins to a plurality of bulk coin storage receptacles according to denomination; (para. 0034, entirety)

electronically controlling a plurality of mechanisms that transfer coins from said bulk coin storage receptacles by denomination to corresponding ones of said dispensing hoppers for dispensing to a

respective user; and (Fig. 11, 8a, 76, para. 0041 last sentence; para. 0052, in its entirety)

comparing amounts of coins dispensed from the machine for the respective user with amounts of coins loaded into the machine by said respective user. (Fig. 13, block 105, para. 0051, last two sentences; Figs. 15, para. 0059 in its entirety.)

NOTE:

In claim 18, there are at least three transfer operations for transferring multiple denominations (e.g. pennies, nickels, dimes, etc.) to different receptacles including 1) directing the coins from the sorter to the bulk coin storage receptacles (31, 32, 33, 34); 2) transferring the coins from the bulk coin storage receptacles (31, 32, 33, 34) to the dispensing hoppers (46, 47, 48, 49); and 3) dispensing the coins from the dispensing hoppers to the an individual receptacle (15, Fig. 2) associated with a respective user and having compartments (16, Fig. 2) for receiving and holding respective denominations. The individual receptacle (15) completes the recycling by being the receptacle from which coins are loaded into the not only provides an electronic controlling action for controlling the transfer from the BCS receptacles to the dispensing hoppers.

The electronically controlling step is also recited in claim 2, so claim 18 adds something that is not in claim 1 in this respect.

The method also receives coins into the BCS receptacles from the sorter and this combination with the electronic controlling step is not seen any cited reference.

In a gravity-type machine illustrated in Fig. 10, the bulk storage receptacles (31, 32, 33, 34) are replaced by gravity feed hoppers 93 seen in Fig. 10 and the dispensing hoppers 46 are similar to dispensing

hoppers in Figs. 3 and 5, except that they are positioned immediately below the gravity feed hoppers 93. So, again as disclosed, there would be four operations with the individual receptacle (15) completing the recycling by being the receptacle from which coins are loaded into the machine in the loading operation.

D. RELATION OF INDEPENDENT CLAIM 26 TO THE DRAWINGS AND DESCRIPTION

26. A method of recycling cash during a work shift, comprising:

responding to inputs from a user in a first operating cycle of a machine to cause an amount of coinage to be dispensed from a plurality of dispensing hoppers into a user coin receptacle having compartments for receiving respective denominations; (para. 0056, 0057, Fig. 16)

storing the amount of dispensed coinage in memory in association with a user account number, which is one of the inputs from the user; (original clam 26; Fig. 13, paras. 0051, 0057)

responding to inputs from a user and a batch of coins put into the machine from the user coin receptacle in a second operating cycle of the machine to total the coinage put into the machine and to store the coinage in bulk coin storage receptacles by denomination; (Fig. 15, para. 0059)

comparing the amount of coinage received in the second operating cycle with the amount of coinage dispensed in the first operating cycle to determine a net amount of coinage associated with the user account number; and (para. 0059)

electronically controlling a plurality of mechanisms that transfer coinage from the bulk storage receptacles to the dispensing hoppers when needed to maintain a predetermined level of coinage in the

dispensing hoppers for dispensing to a user. (Fig. 11, 85a, 76, para. 0041, 0052)

NOTE:

Claim 26 provides for a first, dispensing cycle and a second, input cycle, using a "common" user receptacle having compartments for storing respective denominations and this is not seen any prior art of record. Claim 26 further provides for association of user account numbers with a net amount of coinage received and dispensed from the machine. Claim 26 further provides for electronically controlling "a plurality of mechanisms" that transfer coinage from the bulk storage receptacles to the dispensing hoppers when needed to maintain a predetermined level of coinage in the dispensing hoppers for dispensing to a user and this action is not seen in this form in claim 1 or in claim 18. The claim also combines receiving batches of coins through the sorter with the dispensing and transferring operations.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-9, 12-21 and 23-29 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (US 6,318,537 B1) in view of Harris (US 5,067,928), further in view of Sasadi, U.S. Pat. No. 4,125,195 and still further in view of Carter, U.S. Pat. No. 2002/0152141).

B. Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (US 6,318,537 B1) in view of Harris (US 5,067,928), further in view of Sasadi, U.S. Pat. No. 4,125,195 and still further in view of Carter, U.S. Pat. Pub. No. 2002/0152141 and still further in view of Petri, U.S. Pat. No. 5,830,054.

VII. ARGUMENT

A. SCOPE AND CONTENT OF THE PRIOR ART

1) DEMEYER ET AL., U.S. PAT. NO. 3,383,540 ISSUED 1983.

De Meyer et al. was cited in an Information Disclosure Statement of July 20, 2005, submitted by the Appellants during prosecution.

De Meyer at al. includes in Fig. 1, perhaps the earliest drawing in the art of the combination of a coin sorter (actually two sorters 38, 39) with coin drawers 47, coin bag spouts 48 for accommodating coin bags 49, an intake hopper 19 and an electronic totalizer 16 for issuing a receipt for batches of coins place into the hopper 19. This was a gravity-fed machine. Unlike the present invention, the chutes 27, 28 in Fig. 1 of DeMeyer et al. extend from the intake mechanism 19 to the sorters, 38, 39, not from the sorters to other parts of the machine.

2) JONES ET AL., U.S. PAT. NO. 6,318,537 (JONES ET AL. '537)

Jones et al. discloses three primary embodiments with variations. The first machine 10 resembles an ATM and is shown in Figs. 1-10. It is also useable in a casino environment. (Col. 7, lines 23-24.) At col. 5, lines 15-19, there is a description of an ATM machine, including a description of how change is made for $1.00, as follows: "For example, the user of the currency processing machine 10 may input $102.99 in various small bank notes and pennies and in turn receive a $100 bank note, two $1 bank notes, three quarters, two dimes, and four pennies."

The ATM machine in Figs. 1-10 takes deposits and credits a user's account as mentioned at column 4, lines 24-25, but it is well known that this is done by transmitting the information to a host computer in a bank. The background computer is described in the casino environment as: "Moreover, the host system 200 may be connected to an accounting system which allows the user of the currency processing machine 10 to

credit his or her account after making a deposit" Jones et al. '537, col. 13, lines 6-9.

The ATM embodiment utilizes a coin cartridge 56 seen in Fig. 5 as a "final" receiving receptacle. The coin cartridge is designed and intended to receive only one denomination as discussed by the Jones et al. specification at col. 8, lines 18-20 and lines 60-62 and col. 12, lines 38-42. The coins are received in the cartridge 56 in semi-cylindrical recesses (col. 8, lines 36-37). The coin cartridge 56 is gravity-fed through a single entrance 70 seen in Fig. 5.

There are no bulk coin storage receptacles or dispensing hoppers situated between the coin processing module 32 in Fig. 2 and the coin cartridge 56. The coins flow directly from the coin processing module 32 to the final receptacle, which is the cartridge 56. (Jones et al. '537 patent, col. 8, lines 21-24.)

Although the cartridge 56 can be transferred to the coin dispensing module 36 (Jones et al. '537, col. 8, line 67-col. 9, lines 1-2), the description at col. 9, lines 13-15 uses the term "placed," raising the inference that this is done manually.

When using the cartridge 56, the coins are not sorted by the coin processing module 32 (col. 7, lines 49-51). The coins are diverted by diverters 78a-78d to direct them to the semi-cylindrical recesses in the cartridge (col. 8, lines 48-59).

Figs. 11 and 12 are system diagrams with blocks representing the machines in a casino gaming network (col. 3, lines 56-58; col. 12, lines 42-49).

The Jones ' 537 et al. patent also discloses a first casino cash handling machine illustrated in Fig. 13-19 (col. 15, lines 36-37).

The Jones '537 et al. patent, in Fig. 13-19, is concerned with a coin distribution network 248 (note: a piping system) that flows coins from the

exit channels 254 a-f of the coin processing module 250 to an array of coin receptacles 251 via a network 248 of cooperating tubes 256, rotating coin distribution manifolds 258, and linear coin distribution manifolds 260-265. The linear coin distribution manifolds 260-265 channel coins into the individual coin receptacles 251 under the force of gravity. (Col. 14, lines 26-33.)

No intake hopper is shown in Figs. 13a or 13b or any of the other drawings of the machine of Figs. 13-19. A sorter is represented by a coin processing module 250, but the sorter itself is not shown. From the coin processing module 250, coins are fed by gravity through a series of 1) stationary chutes, 2) rotating manifolds, and 3) linear manifolds to final coin receptacles 251 or bags.

The gravity principle of operation for the embodiments in Figs. 13a-13b is confirmed by claim 15 and 33, last four lines, each of which recites a "pivotal coin chute being adapted to receive the coins from the inlet and to selectively distribute the coins, under the force of gravity, to one of the plurality of outlets."

There are no intermediate receptacles in the embodiments of Figs. 13a-19b for receiving and re-distributing coins. The coins flow from the coin processing module 250 to the final receptacles 251 through a series of chutes, pipes or conduits.

It is clear that the Jones et al. '537 patent has -- at most -- one set of intermediate coin receptacles or bins 402 illustrated in Figs. 20 and 21. These are very large and are used as the dispensing hoppers with counts maintained by counters 404. They are used to receive and dispense coins at the same time (col. 20, lines 16--17).

Also, please note that the embodiments in Figs. 20 and 21, like all of the embodiments in Jones et al. operate by gravity.

Jones et al. '537 intends that the machine 10 be operated by an operator who is a casino employee (col. 1, lines 49-50; lines 51-52; line 57; col. 7, line 41.) The operator typically unloads the machine of Figs. 13-19 as discussed at col. 18, lines 24-29.

The drawings from Figs. 13a-22a in Jones et al. do not show any intake hopper. They rely on the intake hopper shown in Figs. 1 and 10. None of the drawings in Jones et al. show a physical coin sorter, only a box representing a coin sorter and labeled as a coin processing module 32, 250.

3) JONES ET AL., U.S. PAT. NO. 6,637,576

This is a continuation-in-part of Jones et al., U.S. Pat. No. 6, 318, 537 and includes the disclosure of Jones et al., U.S. Pat. No. 6, 318, 537 and adds new Figs. 23-29 and accompanying description. It was made of record in the Information Disclosure Statement of July 28, 2008 to show that the subject matter of Jones et al. was known to the Examiners who granted the parent, Adams et al. U.S. Pat. No. 6,983,836.

4) ADAMS ET AL., U.S. PAT. NO. 6,983,836

The benefit of this patent based on U.S. Appl. No. 10/411,561, filed April 10, 2003, is claimed under 35 U.S.C. 120 in this application in paragraph 0001, and after acceptance of a terminal disclaimer, it is not prior art for any purpose.

This is a single-stage recycling machine that receives a batch of coins from a cash drawer and dispenses to a cash drawer while contemporaneously totaling amounts received and dispensed and associating them with respective employees over a work shift for cash settlement operations. The present invention builds on and provides a significant improvement over the Adams et al. '836 patent.

At the time Adams et al. was patented, prior art such as Jones et al.'537 was available in the coin equipment art unit (actually Jones et al. No. 6,637,576, the continuation-in-part of Jones et al. '537), and was known to the Examiners examining application U.S. Appl. No. 10/411,561.

5) HARRIS U.S. PATENT NO. 5,067,928 (HARRIS '928)

Harris illustrates a slot machine in Fig. 1.

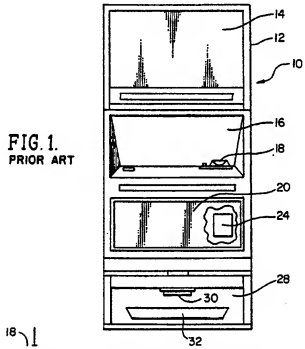


FIG. 1.
PRIOR ART

Harris, U.S. Pat. No. 5,067,928, Fig. 1.

The Harris patent describes a slot machine because the Harris specification repeatedly mentions tokens and relies on the input "slot " 18 (Figs. 1, 2) or 48 (Fig. 3) for entry of one denomination of coins into the machine 10, which is a characteristic of a "slot machine."

As a result of having only a slot input device, the hopper 56 in Harris must be manually pre-loaded with a supply of coins (col. 7, lines 38-40).

Harris also describes the dispensing hopper 56 and tray 32 as being used for "payouts." (Harris, col. 5, lines 50.)

Harris, Figs. 3-6, does not disclose any sorter or any type of electronic control for handling multiple denominations – instead it shows a coin slot 48 for manually feeding coins along a single coin path through a single diverter 24 into the elevator device 70 seen in Fig. 3.

There is no description of handling multiple denominations in the Harris '928 patent.

The coin tray 62 in Harris is not disclosed as having compartments for multiple denominations. The coin tray 62 is also used rejected coins.

Therefore, Harris '928 shows a slot machine with a slot 18 for handling one denomination.

Harris shows a non-gravity means for transferring coins from an elevator type receptacle 70 to a dispensing hopper 56.

Harris was known in the art long before Jones et al., U.S. Patent No. 6,318,537 and Jones et al., U.S. Pat. No. 6, 6,637,576, and yet there is no suggestion in either Jones et al. patent of incorporating any non-gravity mechanism or any mechanism of the type in Harris.

6) PETRI U.S. PATENT NO. 5,830,054 (PETRI '054 PATENT)

Petri is applied by the Examiner only in the rejection of claim 11.

Petri discusses the cash handling problem in retail businesses at col. 1, line 28-54, which is relevant, but then falls short of the present invention.

Petri will not accept change dumped in from its cash drawer 12, because coins must be loaded in a coin caddy 1, or loaded directly into the manually tiltable bins 9. The Petri machine is a pre-loaded dispensing machine and clearly shows the limitations in the prior art in not completely recycling coins from cashier employees.

Of the prior art cited by the Examiner, only Petri automatically dispenses from hoppers to a cash drawer 12. The cash drawer 12 is

placed inside the machine under chutes 11 in Fig. 1 and the coins flow by gravity.

The doors on the cabinet, although not shown, would need to be unlocked, opened and closed to remove the cassette 12. Although Petri does not discuss or show the doors, it is highly unlikely that it would expose all of its interior mechanisms in a commercial setting as drawn in Fig. 1, and one of ordinary skill would understand that it would cover its mechanism with cabinet doors.

Like the other prior art, such as Jones et al. '537, there is only one set of coin bins 9 for receiving coins from a rail sorter track 6 and dispensing to the receptacle 12. Elements 10 are comparable to the coin counters 404 in Jones et al.

There is no disclosure in Petri of reconciling batches of coins received from, and dispensed to, employees.

7) CARTER, U.S. PAT. PUB. NO. 2002/0152141

Carter, U.S. Pat. Pub. No. 2002/0152141 relates to a computer program (Abstract, first sentence) that reconciles or balances revenue contained in cash drawers at the ends of cashier's shifts. This application issued as U.S. Pat. No. 6,896,177, on May 24, 2005 citing extensive prior art originating in the 1980's and 1990's.

Carter discloses that such a program runs on a computer 12 (para. 0031) which is connected to external hardware in the form of a monitor 24, an encoder 16, input devices 22, a printer 18, an external sorter/counter 15 and a scale 14. (Fig. 1, para. 0023)

Carter discloses an inventory of loose change held in unspecified containers and only generally described in paragraph 0055. Carter only discloses a tedious method for manually handling coins using a scale 14, for handling and weighing coins repeatedly as they are placed in the cash

drawers in paras. 0061-0065. These are manual coin handling processes. There is no detailed discussion of how the sorter 15 is used, but the coins would have to manually loaded and transferred from the sorter to the cash drawer, and the totals from the sorter would have to be manually input to the computer.

Such settlement accounting in computers was known before Carter as shown by the references in its file history. There have been several cash settlement software packages known for running on a separate computer, but this requires essentially manual handling of the coins and manual input of coinage totals, a tedious and time consuming affair.

8) SASADI, U.S. PAT. NO. 4,125,195 issued 1978.

Sasadi is a mechanism for filling railroad cars (Abstract, first sentence). The mechanism is large and cumbersome and would no fit in an office machine. It is not disclosed that the four source bins in Sasadi would hold different commodities (See col. 7, lines 38-40). The bins are all processing a single commodity such as dry, powdered rock (See Title).

The final Office action, bottom of page 4, commented in the rejection of claims 1 and 18 that Sasadi discloses a system of dispensing outlets that are moved electromechanically by solenoid valves and mechanical linkages. The dispensing hopper exits in the present claims are not necessarily moved during a recycling operations but are configured or positioned to discharge coins to a cash drawer having multiple compartments for respective denominations.

The Office action states that it would have been obvious to combine Jones et al. with Sasadi to provide a plurality of spouts to fit a coin receptacle with a plurality of coin compartments for multiple denominations. (Page 5, first paragraph, of the final action of May 7, 2009.)

There is no recycling operation in Sasadi, only a dispensing operation. Sasadi dispenses by gravity flow.

Sasadi has been published since 1978. There is no evidence of record that Sasadi would, or ever has, been taken into account in designing office equipment. A person of ordinary skill in the art would not consult Sasadi, due to the availability of Petri and the other art of record as being more pertinent.

B. THE CLAIMS ARE NOT OBVIOUS OVER THE PRIOR ART

1. OBVIOUSNESS CONSIDERATIONS UNDER 35 U.S.C. 103 AND *GRAHAM v. JOHN DEERE*.

MPEP 2141 states that Office policy is to follow *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), in the consideration and determination of obviousness under 35 U.S.C. 103. [T]he four factual inquires enunciated therein as a background for determining obviousness are as follows:

(A) Determining the scope and contents of the prior art;

(B) Ascertaining the differences between the prior art and the claims in issue;

(C) Resolving the level of ordinary skill in the pertinent art; and

(D) Evaluating evidence of secondary considerations.

After performing the Graham analysis, the claims, when considering their subject matters as a whole, must then be judged as to non-obviousness. 35 U.S.C.103(a). This requires a consideration of whether the combination of features recited in the claims would be obvious.

2. ERRORS IN THE EXAMINATION

A) CLAIMS 1, 6 AND 7 ARE NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE).

For the purpose of this section, claims 6 and 7 are deemed to rise and fall with claim 1; claims 6 and 7 will not be argued separately.

1) THE EXAMINER HAS NOT CORRECTLY READ THE RECITATIONS OF CLAIM 1, AND HAS NOT CORRECTLY DETERMINED THE SCOPE AND CONTENT OF THE PRIOR ART APPLIED IN THE FINAL REJECTION.

Step 2 under Graham v. John Deere methodology is determining the differences between the prior art and "the claims." The Office actions do not read the claim recitations properly in making the findings from the last paragraph on page 2 to the third paragraph on page 8.

In particular the final rejection of May 7, 2009, begins at the bottom of page 2 by isolating certain nouns in claim 1, such as the intake area, the sorting mechanism, the dispensing hoppers, the coin transfer mechanisms and the controller, from the limitations which further characterize them, and which recite their cooperative relationship in processing coins. The final Office Action thus treats them as a catalog of generic parts or a generic parts list. The final Office Action skips around in its allusion to the limitations in claims 1, 18 and 26 (apparatus and method claims of different scope) in a way that is difficult to follow, sometimes digressing to dependent claims, for example, at the bottom of page 3, and then returning to discussing claims 1, 18 and 26.

While Jones et al. '537 does have an input device, a controller and some dispensing hoppers, none of them meet the related recitations in

the claims that recite the cooperation of these the components for receiving and dispensing a plurality of sorted denominations to a partitioned receptacle. In addition, Jones et al. '537 has no bulk coin storage receptacles (claim 1, lines 19-21) no two sets of intermediate receptacles (bulk coin storage receptacles and dispensing hoppers) (claim 1, lines 19-21 and 14-18), and no transfer mechanisms (claim 1, lines 22-23) for transferring coins between them, and no device for dispensing to a cash drawer (claim 1, lines 14-18). It is also doubtful that Jones et al. '537 could receive and process a volume of coins from a multi-compartment receptacle (claim 1, lines 8-11) dumped into the small hopper in Fig. 1 of Jones et al. '537 and using a small coin processing module as shown for machine 10 in Fig. 1 of Jones et al. '537.

The Examiner reads claims 1, 18 and 26 in the paragraph at the bottom of page 2 and continuing onto page 3, on an embodiment described at col. 18, line 50-col. 19, line 25 in the Jones et al. '537 patent.

At the bottom of page 2, the Examiner identifies a plurality of dispensing hoppers (402a-f), as illustrated at figures 20, 21 in the third embodiment of the Jones '537 patent. The Jones et al. '537 provides only one set of intermediate receptacles 402a-402f (The term "intermediate" is for contrast with the final receptacle for receiving the coins.) If the Examiner reads these receptacles 402 as dispensing hoppers, they cannot be the bulk coin storage receptacles which are recited in claim 1, lines 19-21. Jones et al. makes the receptacles 402a-402f large, whereas in the present invention as claimed in claims 4 and 5, discussed below, the present invention makes the dispensing hoppers considerably smaller than the bulk coin storage receptacles.

The dispensing hoppers 402a-402f do not have "respective exits positioned for dispensing to an individual receptacle having compartments for receiving and holding respective denominations" as recited in claim 1,

lines 15-18 -- the dispensing hoppers 402a-402f in Figs. 20, 21 dispense to a common coin return path 410 and 412.

In these coin paths 410, 412, illustrated in Fig. 20, the denominations could become mixed, and not retain their sorted condition as called for in claim 1, lines 16-19, where it recites: "the dispensing hoppers having respective exits positioned for dispensing to an individual receptacle having compartments for receiving and holding respective denominations." The other possibility is that only one denomination would be handled at a time, another restriction in the construction and operation of the reference preventing it from meeting the claim recitations.

Looking next at the top of page 3, lines 1-2, of the Office action, the reading of elements 256, 258a-d and 260-265 as the coin transfer mechanisms of claim 1, lines 22-23, is another error because they are not suitable for, and not disclosed as, transferring coins from any bulk coin storage receptacle to the dispensing hoppers. They are disclosed as changing the flow path of coins from a coin processing module 250 to the dispensing hoppers 402 in col. of Jones et al. by force of gravity. (See Jones et al., col. 15, lines 24-32; col. 16, lines 38-43 and col. 18, lines 54-59.)

At the top of page 3, lines 6-9, the Examiner's rejection also says:

> "Note that Jones at col. 9, lines 2-16 describe coin recycling whereby coins deposited by users at one location are processed and dispensed into cartridges for users. Note that cartridges are related to cash tills in that they both hold cash in the form of coins."

The Examiner's reference to the cartridges 56 in the ATM embodiment in Figs. 1, 2 and 5 is an error because the cartridge is designed to handle only one denomination (Jones et al., col. 8, lines 18-20; col. 8, lines 60-62.) Even though it has multiple compartments - it is not meant to receive a plurality of respective denominations. This can be

verified in Fig. 5, because all coins pass through entry end 70. (Jones et al., col. 8, lines 18-20 and 48-49). The cartridge is a type of stacking device for making coin rolls (Jones et al. col. 8, lines 54-55).

The position of the cartridge 56 in the Jones et al. machine 10 is non-analogous to the user receptacle as claimed in lines 15-18 in the present claim 1, because the cartridge 56 receives coins directly from the coin processing module 32 in Fig. 2 of the ATM embodiment. The coins flow directly from the sorter 32 through one of the tubes 38 (col. 6, lines 37-38) to the cartridge 56 by gravity. The cartridge 56 can then moved from location 40 to location 36 in Fig. 2 (col. 8, lines 60 to col. 9, line 2) to become a dispensing module for one denomination. This does not provide "an individual receptacle associated with a respective user and having compartments for receiving and holding respective denominations" (Claim 1, lines 3-5, 10, 15-18, 23-25 and 30-31). The cartridge of Jones et al. does not appear to satisfy any recitation in claim 1.

2) THE EXAMINER HAS NOT MADE OUT A *PRIMA FACIE* CASE BY FINDING ALL OF THE LIMITATIONS IN THE REFERENCES CITED AGAINST CLAIM 1.

From page 3, first full paragraph, to page 5, third paragraph, the Examiner makes a number of modifications to the prior art, which admittedly do not literally meet the claim recitations.

It is helpful in summarizing the issues to state those limitations literally not found in any applied reference.

The Examiner has not found any "coin recycling machine. . . for automatically dispensing coins as a plurality of sorted denominations to an individual receptacle associated with a respective user and having compartments for receiving and holding respective denominations" (Claim 1, lines 1-5). Neither Jones et al. '537, Harris, Sasadi nor Carter meets this recitation.

None of the applied references literally disclose an "intake area . . . configured for receiving batches of unsorted coins which are dumped into the machine by the user from the individual receptacle having compartments for holding respective denominations." (Claim 1, lines 8-11.) While the Examiner would assert that Jones et al. '537 provides such an intake area in Fig. 2, its capacity to handle batches of unsorted coins which are dumped into the machine by the user from the individual receptacle having compartments for holding respective denominations is not disclosed.

None of the applied references literally disclose "an input device for transferring inputs from a user to associate the user with a batch of coins being loaded into the machine from the individual receptacle and to associate the user with coins being dispensed to the user in an individual receptacle having compartments for holding respective denominations;." (Claim 1, lines 24-28).

In the final action, the Examiner does not discuss where such an input device as recited in claim 1 is found in the references. The Examiner discusses this only in connection with claims 12, 13, 23, 24, and 29 at page 6, last full paragraph.

None of the applied references literally disclose "a plurality of dispensing hoppers . . . having respective exits positioned for dispensing to an individual receptacle having compartments for receiving and holding respective denominations." (Claim 1, lines 15-18)

The Examiner tries to meet this limitation first by citing the cartridge 56 in Jones et al. and second, by combining Jones et al. '537 with Sasadi (Office action, page 4, last para.), but Sasadi does not handle respective denominations either.

None of the applied references literally disclose "a plurality of bulk coin storage receptacles positioned for receiving the coins from the

sorting mechanism and holding the coins in unstacked piles by denomination for transfer to the dispensing hoppers." (Claim 1, lines 19-21). None of Jones et al. '537, Harris, Sasadi or Carter literally meet this recitation - the Examiner states at page 4, first full paragraph, that multiple receptacles of the type shown in Harris could be incorporated in Jones et al. '537, Figs. 20 and 21.)

None of the applied references literally disclose "coin transfer mechanisms for transferring coins from the bulk coin storage receptacle to the dispensing hoppers;" (Claim 1, lines 22-23).

The Examiner's position is that a single coin transfer mechanism of the type shown in Harris could be multiplied and substituted for the coin transfer mechanisms (265, 258a-d, 260-265) of Jones et al. '537, Figs. 20 and 21 (See final action, page 4, first full paragraph). This would be substituting a non-gravity transfer mechanism for a gravity-flow, flow-direction control mechanism. One of the manifolds is shown in Fig. 14b of Jones et al. 537 below.

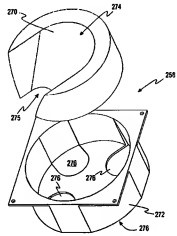


FIG. 14b

Jones et al. '537 does not disclose any electrical circuits, sensors, motors, or electrical interfaces for the rotating coin distribution manifolds 258 and chutes 270 (Compare Jones et al., Fig. 14b above with Figs 11-13 of the present application). Jones et al. Fig. 14b shows a disc-shaped

chute 270 and a cup-shaped housing 272 without any associated electrical motors, control elements or wires. Jones et al. does not state whether the chute 270 rotates either clockwise, counterclockwise or both. Jones et al. '537 does not illustrate, or describe in steps, as is customary for the electronic control of machines, any specific controller program for a controller for controlling its mechanical devices. (Compare Jones et al. with Figs. 11-16 of the present application.)

The Examiner's citation of items 256, 258a-d, 265 in the first two lines of page 3, does not provide the transfer mechanisms of claim 1, or the electrical control of transfer mechanisms recited in claims 18 and 26. Jones et al. '537 at col. 16, lines 47-49 says only: "A suitable controller is electrically coupled to the coin chutes 270 for rotating the coin chute 270 among four apertures."

This is a classic "black box" description of a computer or controller that has been held as insufficient disclosure in a number of cases. See *Biomedino v. Waters Technologies*, 490 F.3d 946 (Fed. Cir. 2007), where a comparable disclosure of "a control means" recitation was held first, not in compliance with 35 U.S.C. 112, first paragraph and therefore, not in compliance with 35 U.S.C. 112, sixth paragraph as supporting a control means element.

A statement of some objective in a patent is not a teaching of any scope, if it is not enabled. A non-enabling reference can only be used for what it teaches. The fact that a reference asserts a result of a process is not an enabling disclosure of the process itself. Reading and Bates Const. v. Baker Energy Res., 748 F. 2d 645, 651, 652; 223 USPQ 1168 (Fed. Cir. 1984).

Based on the lack of electrical disclosure of a type customary in the art of machine control, the Jones et al. '537 patent is non-enabling. Jones et al. does not teach a plurality of transfer mechanisms that would transfer

coins, either by gravity or non-gravity, from one set of internal receptacles, such as the bulk coin storage receptacles, to another set of internal receptacles, such as the dispensing hoppers, before feeding to a set of final receptacles. The mechanisms 258a--258d and 265a--265f are not suitable for this purpose, they merely re-direct a flow of coins and they are not fully disclosed.

Harris discloses two controllers, an elevator controller 65 and a machine (hopper) controller 64 responding to level switches S3, S4-S7 on the hopper 56 and the elevator 70. These could be hard-wired controllers without the programmability for receiving, processing and dispensing flows of multiple denominations. There is nothing in Harris suggesting the type of control illustrated in Figs. 11-16 of the present application and claimed as a controller, as recited in claim 1, lines 29-41, that is electrically connected to the dispensing "hoppers" for automatically dispensing coins to the individual receptacle associated with the user and having compartments for receiving and holding respective denominations . . . and accumulating second totals for coins being dispensed, and for making available the first and second totals associated with the user for comparison; and wherein the controller associates inputs from a plurality of users with cash balances of coins dispensed and received for respective users during their respective work shifts.

Carter is cited by the Examiner at page 5, second paragraph, as providing a software program running on a computer 12 separate from a sorter 15 that would balance totals for coins given to, and received from, an employee over a work shift. The Examiner cites paragraphs 4, 5, 9, 10, 13, 16, 22, 35, 36, 59 and 70. While this lengthy string of paragraph citations appears very authoritative, these paragraphs are immaterial. The relevant and material paragraph is paragraph 72, which describes a

Cash Balance Report. However, this reporting function on an external computer does not meet the limitations of claim 1, lines 31-41 as follows:

> the controller also being electrically connected to the dispensing hoppers for automatically dispensing coins to the individual receptacle associated with the user and having compartments for receiving and holding respective denominations ... and accumulating second totals for coins being dispensed, and for making available the first and second totals associated with the user for comparison; and
>
> wherein the controller associates inputs from a plurality of users with cash balances of coins dispensed and received for respective users during their respective work shifts.

A controller differs from a general purpose computer in that it controls other mechanisms in a machine. Here, claim 1 recites the cooperation of the controller with the other parts of the machine, which is completely missing from the computer in Carter.

Carter uses manual operations to put cash into and take cash out of the cash drawer, one denomination at a time as described in paragraphs 0055 to 0070 in describing what is illustrated in Fig. 2. Note, in particular, para. 0063, first sentence, where the operator must "visually inspect" a specific denomination, such as pennies, in the till and make manual adjustments.

Based on the above discussion, the Examiner has not properly considered all of the limitations of the claim 1, and the content of the prior art, so that the rejection can be reversed as not in compliance with the Graham factors, even before reaching the next step in the analysis.

3) THE EXAMINER MAKES AN OBVIOUSNESS REJECTION BASED ON A COMBINATION WITHOUT SUFFICIENT LOGICAL OR ENGINEERING REASONS FOR THE COMBINATION.

For the sake of discussion only, since the Examiner has not addressed all of the recitations in claim 1 by reference to the prior art, Appellants will address the combination asserted by the Examiner, which as best understood is the following:

The Examiner alleges that is would be obvious to modify Jones et al. having the dispensing hoppers (A) of Figs. 20 and 21 to include the spouts (SP) of Sasadi directed to dispense to a multiple compartment receptacle (MCC), such as ATM cartridge 56 in Fig. 5 of Jones et al., and to add a plurality of elevator type receptacles (NxE) from Harris to receive coins from the chute system in Jones et al. and to add a plurality of the transfer mechanisms from Harris (NxT) to Jones et al. '537 to transfer coins from the bulk coin storage receptacles to the dispensing hoppers, to add the necessary control functions to a controller (M in C) and to add the software (S) from the computer of Carter to the controller (C) of Jones et al., to associate inputs from a plurality of users with cash balances of coins dispensed and received with users during their respective work shifts.

The combination alleged to be obvious by the Office action for claim 1 is thus A+SP+MCC+(NxE)+(NxT)+ (F in C)+S.

The initial probability of this from a purely mathematical standpoint for nine variables (A, SP, MCC, E, T, C, S, F and N) is 1 in 2^9 or at least 1 in 512. The statistical odds are initially over 500:1 against the Examiner's alleged combination. This is believed to make the combination not foreseeable, i.e. not obvious, as even trying one combination in a prototype machine of this complexity would require a very large development expense on the order of tens of thousands of

dollars. The machine would include literally hundreds of parts, as well as a more sophisticated controller than seen in the prior art cited in the rejection.

The Examiner discusses Harris and makes the following conclusory finding, with without any law of obviousness methodology to support it, at page 4, lines 6-10 of the final action:

> At the time of the invention, it would have been obvious to one of ordinary skill in the art to have added a bulk coin receptacle and associated transfer mechanism to each of Jones' dispensing hoppers (402a-f), as taught by Harris, for the purpose of increasing coin storage capacity, thereby reducing machine downtime and labor associated with servicing the coin machine.

The invention in recycling was not motivated by adding storage capacity and reducing servicing calls, but by automating back room cash settlement operations at all levels. The Examiner's cited design motivations are too trivial to result in the predictability or forseeability for combining all of the sub-parts of the claim 1 from the cited art to provide a recycling machine in the first instance.

Harris doesn't teach multiple bulk coin storage receptacles, only one non-gravity type receptacle. Harris doesn't teach bulk recycling. This means that Harris has no input hopper and no sorter, and its elevators are not receiving coins in multiple denominations from a sorter and Harris has no controller for controlling such a function. The supply of coins must be pre-loaded manually into the hoppers 56 and the elevators 70 (Harris, col. 7, lines 38-42).

Jones et al. '537 shows only machines that operate by gravity. Harris is the only art cited by the Examiner that shows a receptacle from which coins are moved by other than gravity. It is highly unlikely that

Jones et al. '537 would change its gravity principle of operation in view of Harris.

The Examiner said when making the restriction requirement in the first Office action in this application on January 25, 2007, before ever addressing the obviousness question:

"Species I, directed to Figs. 6-9, concerns a coin hopper with (a) lifting device to lift the coins to the top of the hopper, wherein they are skimmed off the top into a another receptacle."

"Species II, directed to Fig. 10, concerns a coin hopper with a gravity feed of coins from the bottom to another receptacle."

"The species are independent or distinct because a gravity fed hopper operates differently than a coin hopper with a lifting device that lifts the coins to then be skimmed off the top of the hopper into another receptacle.

It is well settled law that if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

In a gravity-type machine illustrated in Fig. 10 of the present application, the bulk storage receptacles (31, 32, 33, 34, Figs. 3 and 5) are replaced by gravity feed hoppers 93 seen in Fig. 10 and dispensing hoppers 46 are provided, which are similar to dispensing hoppers in Figs. 3 and 5, except that they are positioned immediately below the gravity feed hoppers 93. So, again as disclosed, there are three receptacles operating in series for receiving and dispensing each denomination with the third receiving receptacle being a compartment in the cash drawer 15.

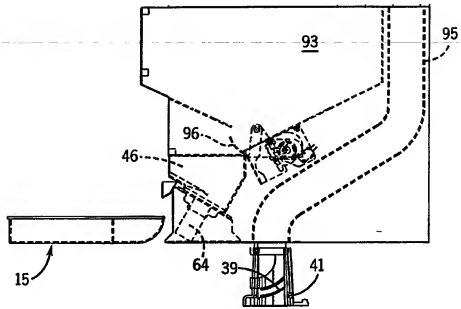


FIG. 10

Fig. 10, U.S. Pat. Appl. No. 10/821,004

Jones et al. '537 and the other art does not even suggest a gravity-based two-stage coin receptacle system with an exit control transfer mechanism 96 between the receptacles 93, 46 as disclosed above.

Thus, Jones et al. '537 in combination with Harris does not suggest either the gravity solution or the non-gravity solution to making a two-stage recycling machine. It highly unlikely that Jones et al. would consider adding the elevator mechanism 70 of Harris, because of lack of utilization of its machines for recycling to retail employees, the lack of space in the machines to accommodate extra equipment, lack of electronic control methodology, lack of motivation to change the principle of operation and lack of recognition that a two-stage receptacle system was desirable.

Jones et al. '537 repeatedly states that the receptacles 402 both receive and dispense coins at the same time at col. 19, lines 10-12 and col. 20, lines 16--17, implying that no further receptacles are necessary.

Also, Jones et al. '537 makes the dispensing hoppers 402 very large, whereas in the invention, the dispensing hoppers are relatively smaller as further claimed in dependent clams 4 and 5.

Harris was issued in 1991, nine years before Jones et al. was filed. Given the number of embodiments, variations, and claims in the Jones et al. '537 patent, if the present combination were obvious, a two-stage system either as disclosed in Figs. 6-9 herein or as disclosed in Fig. 10 herein would have been mentioned in Jones et al. '537, but it was not.

4) THE EXAMINER IS USING APPELLANTS' OWN TEACHINGS AS THE ROAD MAP TO THE OBVIOUSNESS REJECTION.

A more likely explanation for the final rejection is that the Examiner is consciously or unconsciously using Appellants' disclosure in U.S. Pat. No. 6,983,836 as the prior art premise in a hindsight reconstruction. In particular this is true, because Jones et al. '537 falls short of recycling even in the manner of U.S. Pat. No. 6,983,836, which is the parent of this application. This is also true because U.S. Pat. No. 6,983,836 was applied in a double patenting rejection that has now been withdrawn in view of a terminal disclaimer.

U.S. Pat. No. 6,983,836 (the Adams et al. '836 patent) is no longer prior art for any purpose in this examination by virtue of a terminal disclaimer.

The application that led to the 'the Adams et al. '836 patent was examined in the same art unit as the present application, by Examiner Beauchaine under SPE Walsh. All of the prior art cited against the claims herein was available in the coin equipment art unit at the time the application that led to the '836 patent was examined and issued in 2006.

The Adams et al. '836 patent was filed April 10, 2003 and issued January 10, 2006. U.S. Patent No. 6,637,576, was filed Oct. 16, 2000 and issued October 28, 2003 by Examiner Beauchaine under SPE Walsh.

U.S. Patent No. 6,637,576, is a continuation-in-part of Jones et al. U.S. Pat. No. 6,318,537 and includes all of the drawings 1-22b and description of U.S. Patent No. 6,637,576. Although neither patent was cited in U.S. Pat. No. 6,983,836, the Examiners had just issued U.S. Pat. No. 6,637,576 before examining the Adams '836 patent.

The Jones et al. '537 patent does not disclose a recycling machine for multiple-compartment user receptacles in Figs. 13-22 and it is not the equivalent of Appellants' U.S. Pat. No. 6,983,836, since if that were the case, U.S. Pat. No. 6,983,836 would never have been granted by the same Examiners. The '836 patent is the only recycler, other than recycler herein, receiving and dispensing coins to the same multi-compartment user receptacle while also accounting for transactions.

The generalized desire to add storage capacity is not enough to reinvent Appellants machines in the '836 patent, or in the present application, which are the first integrated machines to receive and dispense to the same type of multi-compartment containers, for multiple denominations, while provided cash settlement accounting for multiple employees over a work shift. Whether the Examiner is conscious of this or not, the findings in the rejection of claim 1, and the other claims to be discussed below are just a hindsight reconstruction following Appellants' claims and disclosures.

B) CLAIMS 2 AND 3 ARE NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE.)

Claims 2 and 3 are argued individually and do not rise or fall with claim 1 or with each other.

Claims 2 and 3 are dependent claims, but in considering claims 2 and 3, they are to be considered as a whole with recitations of claim 1, and not in isolation.

1) CLAIM 2:

Claim 2 depends from claim 1 and recites:

"wherein the controller also controls the coin transfer mechanisms for transferring coins from the bulk coin storage receptacle to the dispensing hoppers."

This is in parallel with the electronic controlling recitation in claim 18.

Claim 2 relates further to distinguishing the controller and control circuits in the present invention from the black box controller of Jones et al. '537, and from the one-denomination controller of Harris and from the computer of Carter.

This recitation is not literally found in the applied references.

At the bottom of page 3, last two lines of the Office Action of May 7, 2009, the Examiner cites a teaching from Harris as supplying this matter.

It is not obvious to modify the controller of Harris to perform the functions of claim 2, as well as the functions previously discussed in regard to claim 1, such as receiving batches or coins input through a sorter, and to extend its teaching to a multiple denomination machine. There are additional considerations in handling multiple denominations, and tracking them for multiple employees which are addressed by Figs. 13-16 and related description in the present application. If there was any motivation in Jones et al. '537, it is negated by the non-enabling disclosure for the functions actually described in Jones et al. '537. Therefore, the only motivation for providing the controller of the present invention is the Appellants' own invention disclosure.

2) CLAIM 3:

Claim 3, depends from claim 2, and recites wherein the controller has a plurality of control circuits one for each denomination, which control transfer of coins from a respective one of the bulk coin storage receptacle to a respective one of the dispensing hoppers.

Claim 3 relates to distinguishing the controller and control circuits in the present invention from the "black box" controller of Jones et al. '537, and from the one-denomination controller of Harris and from the computer of Carter.

There are no control circuits, one for each denomination, literally found in the applied references, particularly Jones et al. '537.

At the bottom of page 5, second last paragraph, of the Office Action of May 7, 2009, the Examiner cites col. 7, lines 8-22 and 34-38 from Jones et al., which concerns the ATM embodiment in operating flap-type diverters. Flap-type diverters 44, 46a, 46b are not transfer mechanisms for transferring coins between bulk coin storage receptacles and dispensing hoppers, they only control which gravity-type flow path is open from the sorter 32 to some final receptacles such as coin bags or boxes in Fig. 3 of Jones et al. It may be that in such a case, coins are not sorted by the sorter 32, but by controlling the diverters, or that only one denomination is handled, similar to cartridge 56 discussed above. In any event, this is an arrangement that is non-analogous to the arrangement of claim 1 from which claim 3 depends.

There are no control circuits as recited in claim 3 that are illustrated or described in Jones et al. '537. The only motivation for providing the control circuits of claim 3 is the Appellants own invention disclosure.

C) CLAIMS 4 AND 5 ARE NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928,

SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE.)

Claims 4 and 5 are argued individually and do not rise or fall with claim 1 or with each other.

Claims 4 and 5 are dependent claims, but in considering claims 4 and 5, they need to be considered as a whole with recitations of claim 1, and not in isolation.

1) CLAIM 4:

Claim 4 provides "wherein each of the bulk coin storage receptacles has a capacity at least three times the capacity of one of the dispensing hoppers."

The Examiner rejected claim 4 at the top of page 6, because he said it would be obvious to make the bulk coin storage receptacles and dispensing hoppers to any size ratio.

The Examiner cites an "operator's business" comment in Jones et al., col. 15, lines 33-41, that has been misconstrued throughout the examination. This simply means that the machine will handle different denominations sets, such as Euros or casino token according to the operator's business (See Jones et al., col. 15, lines 38-41). It doesn't mean that the machine can be re-designed in any way that can be imagined by the Examiner after reading Appellants' disclosure.

The Examiner's ground for rejection is countered by the evidence in the prior art.

Harris shows about a 1:1 ratio of size between an intermediate receptacle 70 to a dispensing hopper 56 in Fig. 3. Jones et al. '537 makes its dispensing hoppers 402 very large (see Fig. 21) for commonly used denominations.

The present invention teaches that the intermediate receptacles should made larger, because they store supplies of coins, whereas the

dispensing hoppers can be made smaller, if there is a suitable controller for automatically replenishing them on a frequent basis as further disclosed in the present application. The receptacles also have to receive large batches of coins received from the sorter, which is not a requirement that is present in Harris.

The art, including Jones et al. '537 and Harris, doesn't disclose or suggest that. The Examiner's rejection is a *pro forma* rejection seen in all office actions reciting numerical ranges and should be reversed in view of the above explanation.

2) CLAIM 5:

Claim 5 provides "wherein each of the bulk coin storage receptacles has a capacity at least ten times the capacity of one of the dispensing hoppers."

The Examiner rejected claim 5 at the top of page 6, because he said it would be obvious to make the bulk coin storage receptacles and dispensing hoppers to any size ratio.

This is countered by the evidence in the prior art.

Harris shows about a 1:1 ratio of an intermediate receptacle 70 to a dispensing hopper 56. Jones et al. '537 makes its dispensing hoppers 402 very large for commonly used denominations (see Jones et al., Fig. 21.)

The present invention teaches that the intermediate receptacles should made larger, because they store supplies of coins, whereas the dispensing hoppers can be made smaller, if there is a suitable controller for automatically replenishing them on a frequent basis as further disclosed in the present application. The receptacles also must receive large batches of coins received from the sorter, which is not a requirement that is present in Harris.

The art, including Jones et al. '537 and Harris, doesn't disclose or suggest that. The Examiner's rejection is a *pro forma* rejection seen in all office actions reciting numerical ranges and should be reversed in view of the above explanation.

D) CLAIMS 8 AND 9 ARE NONOBVIOUS BECAUSE JONES ET. AL '537 OPERATES ACCORDING TO THE GRAVITY PRINCPLE, WHICH WAS THE SUBJECT OF THE EXAMINER'S RESTRICTION REQUIREMENT IN THIS APPLICATION, AND HARRIS OPERATES ACCORDING TO A NON-GRAVITY PRINCIPLE. (REPLY TO GROUND OF REJECTION A. ABOVE)

These claims are argued separately and they do not rise and fall together or with claim 1.

First, claims 8 and 9 are nonobvious because not all of the major elements have been identified in claim 1 from which these claims depend (no prima facie case), and dependent claims are to be considered as a whole to include the limitations of the claims from which they depend.

Second, the combinations reflected in these claims, when considered as a whole with claim 1 are nonobvious.

1) CLAIM 9:

Claim 9 further recites that the coin transfer mechanisms further comprise skimmer mechanisms mounted on the bulk coin storage receptacles for pushing coins on top of the unstacked piles from bulk coin storage receptacles to the dispensing hoppers. This claim provides a non-gravity solution to transferring coins from the bulk coin storage receptacles to the dispensing hoppers.

The first Office action in this application was issued on January 25, 2007, and this was a restriction requirement based on two Species.

The Examiner stated on page 2, second and paragraphs that:

"Species I, directed to Figs. 6-9, concerns a coin hopper with (a) lifting device to lift the coins to the top of the hopper, wherein they are skimmed off the top into a another receptacle."

"Species II, directed to Fig. 10, concerns a coin hopper with a gravity feed of coins from the bottom to another receptacle."

"The species are independent or distinct because a gravity fed hopper operates differently than a coin hopper with a lifting device that lifts the coins to then be skimmed off the top of the hopper into another receptacle.

All of the embodiments in Jones et al. '537 are drawn to gravity-fed machines. It would be nonobvious to combine the mechanisms of Jones et al. '537 and Harris because as the Examiner said at a time when the issue was neutral that "The species are independent or distinct because a gravity fed hopper operates differently than a coin hopper with a lifting device that lifts the coins to then be skimmed off the top of the hopper into another receptacle.

It is well settled law that if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The discussion of gravity and non-gravity embodiments is incorporated here from the discussion regarding claim 1.

Jones et al. '537 in combination with Harris does not suggest either the gravity solution or the non-gravity solution to making a two-stage recycling machine (see discussion in reply to the rejection of claim 1

above). It highly unlikely that Jones et al. would consider adding the elevator mechanism of Harris, because of lack of space, lack or electronic control methodology, lack of motivation to change the principle of operation, and lack of recognition that a two-stage receptacle system was desirable.

Jones et al. emphasizes that the receptacles 402 both receive and dispense coins at the same time at col. 19, lines 10-12; col. 20, lines 16--17, implying that no further receptacles are necessary. Also, Jones et al. '537 makes the receptacles 402 very large, whereas in the invention, the dispensing hoppers are relatively small, as further claimed in dependent clams 4 and 5.

Harris was published in 1991, nine years before Jones et al. was filed. Given the number of embodiments and variations in the Jones et al. '537 patent and the well known propensity of the assignee therein to describe any possible embodiment or variation, if the combination was obvious, a two-stage system either as disclosed in Figs. 6-9 herein or as disclosed in Fig. 10 herein would have been mentioned in Jones et al. '537, but it was not.

2) CLAIM 8:

Claim 8 depends from claim 9 and further provides that the bulk coin storage receptacles have lifting platforms for lifting coins from the receptacles to a predefined height for contact by the skimmer mechanisms. This claim provides a non-gravity solution to transferring coins from the bulk coin storage receptacles to the dispensing hoppers.

Claim 8 further defines a non-gravity solution to transferring coins from the bulk coin storage receptacles to the dispensing hoppers.

It is not obvious to incorporate multiple versions of the Harris elevator in Jones et al. '537 for all of the reasons given above for claim 9,

because neither reference provides a suitable controller to control such a machine.

Therefore, claims 8 and 9 are nonobvious over Jones et al. '537 in view of Harris and the other cited references and the Examiner's rejection should be reversed.

E) CLAIM 12 IS NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE.)

Claim 12 recites "wherein the controller includes memory for storing a plurality of user accounts with a balance per user of coins received and coins dispensed during a work shift." This is illustrated in Fig. 13 and description at para. 0051.

The Examiner said at the bottom of page 6 and the top of page 7, "it is considered obvious to ... have connected the system controller (39) (ATM embodiment of Jones et al. '537) to a memory that stores the various user accounts, input and output values for plural users, as this is a standard method for storing and manipulating data discussed in Jones (no cite to Jones et al. text).

The claim calls for the memory with this stored data to be in the controller, not simply connecting a controller to a an external memory, such as in an external computer.

Since the Examiner has misstated claim 12 in comparison to Jones et al. '537, Appellants would ask the Board to consider that there are no grounds stated to reject this claim, and to reverse the rejection of claim 12.

F) CLAIMS 13, 14 AND 15 ARE NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE.)

Claims 14 and 15 rise and fall with claim 13.

Claim 13 provides that "the input device is a card reader input device electrically connected to the controller for transferring inputs from a plurality of users to the controller." This is disclosed as a device 24, 25, 97, by which an employee/user inputs an ID or account number (Para. 0059) to associate with a batch of coins.

The Examiner cites the Jones et al. ATM embodiment in Figs. 1-10, as disclosing a media reader 24 as described at col. 5, lines 25-37. However, there is no description of the operation of media reader 24 in connection with the embodiments in Figs. 13-22. It is apparent that the Jones et al. machines do not allow a user to input an ID and take out a batch of coins because the operator typically unloads the machine as discussed at col. 18, lines 24-29.

This relates back to fact that the "input device" recitations in claim 1 are not addressed in the Office action in the rejection of claim 1, as discussed above, including: "an input device for transferring inputs from a user to associate the user with a batch of coins being loaded into the machine from the individual receptacle and to associate the user with coins being dispensed to the user in an individual receptacle having compartments for holding respective denominations."

This is not provided simply by either the ATM embodiment or the other embodiments in the Jones et al. '537 patent.

Therefore, the rejection of claims 13, 14 and 15 should be reversed along with reversal of the rejection of claim 1, from which they depend.

G) CLAIM 16 IS NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE.)

Claim 16 provides for level sensors in a plurality of dispensing hoppers for signaling a need to replenish the hoppers and a controller for responding to such level sensors. The Examiner cites Harris at the bottom of page 3 of the final Office action of May 7, 2009, and on page 4 makes a rejection based on combining Jones et al. and Harris. Harris' controller does not handle multiple denominations for dispensing, and therefore, this claim is seen as patentable since the combination of Harris and Jones et al. does not provide a suitable controller or control mechanisms for transferring coins from a plurality of bulk coin storage receptacles to a plurality of dispensing hoppers for multiple denominations.

H) CLAIM 17 IS NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE.)

Claim 17 recites matter that parallels the input and output cycles recited in method claim 26, however, claim 17 has additional recitations by virtue of its depending from claim 1, so it will be argued separately.

Claim 17 recites that the controller is responsive to inputs from a user in a first operating cycle of the machine to cause the receptacles to dispense an amount of coins sorted by denomination and to store the

dispensed amount of coins in memory in association with a user account number, the controller being responsive to input of a batch of coins and the user account number in a second cycle to count the coins received, and store the amount of coins received and the amount of coins dispensed for comparison to determine a net amount of cash associated with the user.

The Examiner's rejection is stated on page 7, last full paragraph.

Here, the Examiner equates this claim crediting a user's account for deposits and withdrawals of any type of money in an ATM, but the ATM does not receive and dispense the batches of coins recited in claim 17. The Examiner has not addressed the material recitations of claim 17 in the rejection, and the rejection should be reversed for lack of support.

I) CLAIMS 18, 19, 20 AND 25 ARE NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE).

For the purpose of this section, claims 19, 20 and 25 are deemed to rise and fall with claim 18; claims 19, 20 and 25 will not be argued separately.

1) CLAIM 18 IS NOT OBVIOUS BECAUSE ITS LIMITATIONS ARE NOT LITERALLY TAUGHT OR SUGGESTED BY ANY OF THE FOUR APPLIED REFERENCES.

Step 2 under Graham v. John Deere methodology is determining the differences between the prior art and "the claims." The Office actions in this application never do this properly.

The Examiner treats method claims 18 and 26 at the same time as apparatus claim 1. This is confusing and in error, as it is apparent that

claims 18 and 26 are method claims that have operative method limitations and have additional limitations not found claim 1.

The final action is in error as to claim 18 because the limitations are not found or cited in the applied art of Jones et al. '537, Harris, Sasadi and Carter.

Neither the embodiments in Figs. 2, 20 and 21 Jones et al. '537 mentioned in the Final Office action at the bottom of page 2, nor Harris show or describe the subject of claim 18, lines 2-4 of:

"dispensing coins by denomination from a plurality of dispensing hoppers in a machine to a user coin receptacle having compartments for receiving respective denominations."

As discussed above cartridge 56 does not qualify as this user coin receptacle so no such operative act is performed in Jones et al.

Claim 18, lines 6-8, further claims:

> "loading batches of coins having a plurality of denominations into the machine from the user coin receptacle and totaling amounts of the batches of coins in relation to respective users;"

Neither the embodiments in Figs. 2, 20 and 21 Jones et al. '537 mentioned in the Final Office action at the bottom of page 2, nor Harris show or describe this and this recitation is not addressed in the final office action.

Claim 18, lines 10-11 recites:

"directing said coins to a plurality of bulk coin storage receptacles according to denomination;"

Neither Jones et al. '537 nor Harris nor Sasadi nor Carter direct coins to a plurality of bulk coin storage receptacles that are not the dispensing hoppers.

Claim 18, 12-15, recites:

"electronically controlling a plurality of mechanisms that transfer coins from said bulk coin storage receptacles by denomination to corresponding ones of said dispensing hoppers for dispensing to a respective user."

In this regard, claim 18 recites in parallel to claim 2 and this was not appreciated by the Examiner when he lumped claims 1 and 18 together for discussion in the final action.

Neither Jones et al. '537 nor Harris nor Sasadi nor Carter describe or suggest this action, and this is not covered or addressed in the final office action of May 7, 2009.

The Examiner's citation of items 256, 258a-d, 265 in the first two lines of page 3, does not overcome this shortcoming because their electrical control is not enabled or illustrated and is only sketchily described in Jones et al '537, col. 16, lines 47-49 as "A suitable controller is electrically coupled to the coin chutes 270 for rotating the coin chute 270 among four apertures."

This is a classic "black box" description that has been held as insufficient disclosure in a number of cases. See *Biomedino v. Waters Technologies*, 490 F.3d 946 (Fed. Cir. 2007), where a comparable disclosure of "a controller" was deemed first, not in compliance with 35 U.S.C. 112, first paragraph and therefore, not in compliance with 35 U.S.C. 112, sixth paragraph as supporting a control means element.

A statement of some objective in a patent is not a teaching of any scope, if it is not enabled. A non-enabling reference can only be used for what it teaches. The fact that a reference asserts a result of a process is not an enabling disclosure of the process itself. Reading and Bates Const. v. Baker Energy Res., 748 F. 2d 645, 651, 652; 223 USPQ 1168 (Fed. Cir. 1984).

Jones et al. '537 does not show any electrical circuit or devices for controlling its mechanisms, particularly rotating coin distribution manifolds 258a-258d, other than a box labeled controller 39 in Figs. 1 and 10 and some very general description. Jones et al. '537 does not enable any specific circuit for controlling the embodiments illustrated therein (Compare with Figs. 11-16 of the present application.)

Based on the above discussion the Examiner has not made out a *prima facie* case of obviousness by finding all of the limitations in one or another of references. The Examiner has not supplied other teachings in the art sufficient to make up this gap.

Furthermore, the modification of the references and the combination of elements is not obvious because the collective art does not suggest combining these operations:

1) dispensing coins by denomination from a plurality of dispensing hoppers in a machine to a user coin receptacle having compartments for receiving respective denominations and totaling amounts dispensed in relation to respective users; (a method claim manipulative act)

2) loading batches of coins having a plurality of denominations into the machine from the user coin receptacle and totaling amounts of the batches of coins in relation to respective users; (a method manipulative act);

3) receiving the coins that are fed into the machine and sorting said coins by denomination, counting said coins and directing said coins to a plurality of bulk coin storage receptacles according to denomination (these are method claim acts in claim 18); and

4) electronically controlling a plurality of mechanisms that transfer coins from said bulk coin storage receptacles by denomination to corresponding ones of said dispensing hoppers for dispensing to a respective user (this is an automated method claim act in claim 18); and

5) comparing amounts of coins dispensed from the machine for the respective user with amounts of coins loaded into the machine by said respective user.

As to element 5), Carter in paragraph 72 describes balancing amounts given to and received from an employee in a cash drawer, but not necessarily batches of coins that have been loaded into or dispensed by a machine. In Carter, these are amounts taken out of a till by hand for for weighing on a scale 14 as described in para. 0055-0070.

None of art performs feature 2) above. None of the art literally performs feature no. 3) above. Jones et al. directs the coins either to a final receptacle in Figs. 3 and 5 or to dispensing hoppers 402 in Figs. 20 and 21 (Elements 404 are counters, and not receptacles). Jones admittedly doesn't perform no. 4) above, based on the citation of Harris and Harris doesn't literally perform this action either. Carter requires manual processing of the individual denominations by an operator to transfer them in and out of the cashier's tray as discussed at paras. 0055-0070 as discussed for claim 1.

The final Office Action never really addresses the method claim limitations of claim 18. The discussion of claim 1 in the final Office action is not valid to reject the method claim recitations of claim 18. Therefore, the rejection of claim 18 should be reversed.

J) CLAIM 21 IS NONOBVIOUS BECAUSE JONES '537 ET. AL OPERATES ACCORDING TO THE GRAVITY PRINCPLE WHICH WAS THE SUBJECT OF THE EXAMINER'S RESTRICTION REQUIREMENT IN THIS APPLICATION AND HARRIS OPERATES ACCORDING TO A NON-GRAVITY PRINCIPLE. (REPLY TO GROUND OF REJECTION A. ABOVE)

Claim 21 is nonobvious because not all of the major elements have been identified in claim 18 from which this claim depends (no prima facie case), and dependent claims are to be considered as a whole to include the limitations of the claims from which they depend.

Second, the combinations reflected in these claims are nonobvious.

Claim 21 provides for the action of transferring coins from the bulk coins storage receptacles by lifting coins from the receptacles to a predefined height and rotationally skimming the coins into the dispensing hopper, which also a non-gravity operation.

The first Office action in this application was issued on January 25, 2007, and this was a restriction requirement based on two Species.

The Examiner stated on page 2, second and paragraphs that:

"Species I, directed to Figs. 6-9, concerns a coin hopper with (a) lifting device to lift the coins to the top of the hopper, wherein they are skimmed off the top into a another receptacle."

"Species II, directed to Fig. 10, concerns a coin hopper with a gravity feed of coins from the bottom to another receptacle."

"The species are independent or distinct because a gravity fed hopper operates differently than a coin hopper with a lifting device that lifts the coins to then be skimmed off the top of the hopper into another receptacle.

All of the embodiments in Jones et al. '537 are drawn to gravity-fed machines. It would be nonobvious to combine the mechanisms of Jones

et al. '537 and Harris because as the Examiner said at a time when the issue was neutral that "The species are independent or distinct because a gravity fed hopper operates differently than a coin hopper with a lifting device that lifts the coins to then be skimmed off the top of the hopper into another receptacle.

It is well settled law that if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The discussion of gravity and non-gravity embodiments in the present application at pages 4 and 5 and pages 26-30 is hereby incorporated by reference.

Jones et al. '537 in combination with Harris does not suggest either the gravity solution or the non-gravity solution to making a two-stage recycling machine. It highly unlikely that Jones et al. would consider adding the elevator mechanism of Harris, because of lack of space, lack of electronic control methodology, lack of motivation to change the principle of operation from gravity to non-gravity and the lack of recognition that a two-stage receptacle system was desirable. When Jones et al. needs more capacity, as when proceeding from the ATM embodiment in Figs. 1-10 to the embodiment of Figs. 20 and 21, it simply makes the hoppers 402 very large.

Jones repeatedly states that receptacles 402 both receive and dispense coins at the same time col. 19, lines 10-12 and col. 20, lines 16--17, implying that no further receptacles are necessary. Also, Jones et al. '537 makes the dispensing hoppers very large, whereas in the invention, the dispensing hoppers are relatively smaller as further claimed in dependent clams 4 and 5.

Harris was issued in 1991, nine years before Jones et al. was filed. Given the number of embodiments and variations in the Jones et al. '537 patent, and the demonstrated propensity of the patentee therein to describe any possible embodiment or variation, if the combination was obvious, a two-stage system either as disclosed in Figs. 6-9 herein or as disclosed in Fig. 10 herein would have been mentioned in Jones et al. '537, but it was not.

Therefore, claim 21 is nonobvious over Jones et al. '537 in view of Harris and the other cited references and its rejection should be reversed.

K) CLAIMS 23, 24 AND 28 ARE NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE).

Claims 23, 24 and 28 depend from different claims, namely, claims 23 and 24 depend from claim 18 and claim 26 depends from claim 28 from claim 26, but they add comparable subject matter, which is also seen in claim 1.

Claim 24 recites in a method claim:

"reading in identification inputs from a plurality of users; and

"associating said identification inputs from a plurality of users with cash balances of cash dispensed and received for respective users during their respective work shifts."

Jones et al. '537 does not appear to provide a cash reconciliation routine for a plurality of employee deposits and withdrawals. The operator typically unloads the machine of Figs. 13-19, as discussed at col. 18, lines 24-29. The ATM machine in Figs. 1-10 takes deposits but probably needs the assistance of an external computer to credit the user's account as is typical in ATM machines. ("Moreover, the host system 200

may be connected to an accounting system which allows the user of the currency processing machine 10 to credit his or her account after making a deposit" Jones et al. '537, col. 13, lines 6-9).

Carter in paragraph 72 describes balancing amounts given to and received from an employee in a cash drawer, but not necessarily batches of coins that have been loaded into or dispensed by a machine. In Carter, these are amounts taken out of a till by hand for weighing on a scale 14 as described in para. 0055-0070. The sorter 15 in Carter would not perform the claimed method operations of claim 18 from which claims 23, 24 depend or claim 26 from which claim 28 depends.

The combination of features provided in claims 23, 24 and 28 when considered with the claims from which they depend is not foreseeable from teachings of Jones et al., Harris, Sasadi and Carter and therefore the Examiner's rejection of these claims should be reversed.

L) CLAIMS 26 AND 27 ARE NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195 AND CARTER, U.S. PAT. PUB. NO. 2002/0152141. (REPLY TO GROUND OF REJECTION A. ABOVE).

For the purpose of this section, claim 27 is deemed to rise and fall with claim 26; claim 27 will not be argued separately.

1) CLAIM 26 IS NOT OBVIOUS BECAUSE ITS LIMITATIONS ARE NOT LITERALLY TAUGHT OR SUGGESTED BY ANY OF THE FOUR APPLIED REFERENCES.

The embodiment in Figs. 2, 20 and 21 of Jones et al. as described at col. 18, line 50 to col. 19, line 25 (paragraph bridging pages 2 and 3 final action), doesn't meet the claim language of claim 26, lines 3-6 of "responding to inputs from a user in a first operating cycle of a machine to cause an amount of coinage to be dispensed <u>from</u> a plurality of

dispensing hoppers into a user coin receptacle having compartments for receiving respective denominations;"

None of the references, Jones et al. '537, Harris, Sasadi or Carter perform this method action either literally or in some equivalent fashion.

The Examiner's reference to the cartridge 56 in the ATM embodiment in Figs. 1, 2 and 5 does not suggest the above action because the cartridge is designed to handle only one denomination (Jones et al., col. 8, lines 18-20; col. 8, lines 60-62). The cartridge 56 is fed with a single denomination through a common entrance 70 seen in Fig. 5.

Claim 26, lines 7-8 provides "storing the amount of dispensed coinage in memory in association with a user account number, which is one of the inputs from the user;"

This together with lines 3-6 provides a dispensing cycle that is not seen in Jones al. '537, Harris or Carter.

In Jones, the operator (different from a user) typically unloads the machine as discussed at col. 18, lines 24-29.

In Harris, no user account number is entered into the machine.

In Carter, the input and output of coins is not accompanied by a user account number being input into the same machine as the coins.

Claim 26, lines 7-12 recites:

"responding to inputs from a user and a batch of coins put into the machine from the user coin receptacle in a second operating cycle of the machine to total the coinage put into the machine and to store the coinage in bulk coin storage receptacles by denomination."

In conjunction with the recitation in lines 3-6, which was an output cycle, this provides an input cycle. This cycle is triggered by a user putting in a user account number and putting in a batch of coins into the

machine and the coins reaching the bulk coin storage receptacles, which are distinct and different from the dispensing hoppers.

This does not happen in either Jones et al., or Harris or Carter.

Claim 26 also provides for:

"electronically controlling a plurality of mechanisms that transfer coinage from the bulk storage receptacles to the dispensing hoppers when needed to maintain a predetermined level of coinage in the dispensing hoppers for dispensing to a user."

The controller in Harris handles only transfer of a single denomination. Jones et al. does not disclose any control of a plurality of mechanisms that transfer coinage from the bulk storage receptacles to the dispensing hoppers. Jones at best re-directs the flow of coins through rotating manifolds 258a-258d, and even this disclosure is non-enabling as discussed above.

Neither Jones, nor Harris nor Carter suggest combining the input cycle discussed above, the output cycle discussed above and the electronic controlling action recited above, to provide a two-stage recycling machine that can be operated by retail employee/users using multi-compartment receptacles.

There are no specific findings on these method claim recitations in claim 26 in the final Office action. The remarks concerning claim 1 are insufficient in treating the method claim recitations of claim 26. The rejection of claim 26 should be reversed.

N) CLAIM 29 IS NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195, CARTER, U.S. PAT. PUB. NO. 2002/0152141. AND PETRI (REPLY TO GROUND OF REJECTION A. ABOVE).

The Examiner erroneously grouped claim 29 with claim 1, rather than with claim 11 from which it depends. Therefore, there is no current

valid rejection for claim 29, because the rejection under claim 1 does not consider the limitations of claim 11, which are incorporated in claim 29.

Claim 29 adds to claim 1, the recitations of claims 11, 12 and 13 in combination:

11. The housing has a cash drawer receiving slot in a front side of the housing that is configured to receive a cash drawer having multiple compartments; and wherein the coins are dispensed into the multiple compartments of the cash drawer by denomination;

12. The controller includes a memory for storing a plurality of user accounts with a balance per user of coins received and coins dispensed during a work shift; and

13. The coin recycling machine further comprising a card reader input device electrically connected to the controller for transferring inputs from a plurality of users to the controller.

Since the rejection is procedurally in error and has not considered all of the limitations or correctly applied the prior art, it is respectfully requested that the rejection be reversed as to claim 29. In addition the rejection should be reversed for the same reasons as claim 11 which follows.

O) CLAIM 11 IS NOT OBVIOUS OVER JONES ET AL., US PAT. NO. 6,318,537, IN VIEW OF HARRIS, US PAT. NO 5,067,928, SASADI, U.S. PAT. NO. 4,125,195, CARTER, U.S. PAT. PUB. NO. 2002/0152141. AND PETRI (REPLY TO GROUND OF REJECTION B. ABOVE).

Claim 11 adds to claim 1, that the housing has a cash drawer receiving slot in a front side of the housing that is configured to receive a cash drawer having multiple compartments; and wherein the coins are dispensed into the multiple compartments of the cash drawer by denomination.

Of the prior art cited by the Examiner, only Petri automatically dispenses from hoppers to a cash drawer 12. The cash drawer 12 is placed inside the machine under chutes 11 in Fig. 1 and the coins flow by gravity.

The doors on the cabinet, although not shown, would need to be unlocked, opened and closed to remove the cassette 12. Although Petri does not discuss or show the doors, it is highly unlikely that it would expose all of its interior mechanisms in a commercial setting as drawn in Fig. 1, and one of ordinary skill would understand that it would cover its mechanism with cabinet doors. Therefore, Petri does not disclose a receiving slot in the front side of the housing that is configured to receive a cash drawer.

Like the other prior art, such as Jones et al. '537, there is only one set of coin bins 9 in Petri for receiving coins from a rail sorter track 6 and dispensing to the receptacle 12. Elements 10 are comparable to the coin counters 404 in Jones et al. Petri is a gravity-feed machine.

If Petri moved its drawer forward to the front side of the machine, it could no longer receive coins dropping downward by force of gravity.

Therefore, Petri is not seen to literally meet the limitations of claim 11, and the modification of Petri to meet the claim 11 is not suggested by any of the prior art.

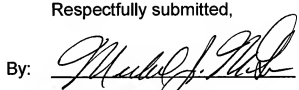
Also, Petri is a dispensing machine, not a recycler that will accept batches of coins from its cassette 12.

Therefore, it is respectfully requested that the rejection of claim 11 be reversed.

CONCLUSION

Appellants respectfully request the Board to reverse the Examiner on all issues on appeal and to allow claims 1-9, 11-21 and 23-29 as patentable over the art of record.

Respectfully submitted,

By: 

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APPENDIX A

Claims on Appeal in Patent Application No. 10/821,004

1. (Rejected-Appealed) A coin recycling machine for receiving coins, for sorting coins into a plurality of denominations and for automatically dispensing coins as a plurality of sorted denominations to an individual receptacle associated with a respective user and having compartments for receiving and holding respective denominations, the machine comprising:

a housing;

an intake area on the housing configured for receiving batches of unsorted coins which are dumped into the machine by the user from the individual receptacle having compartments for holding respective denominations;

a sorting mechanism for receiving the batches of coins loaded into the machine and sorting the coins into a plurality of denominations;

a plurality of dispensing hoppers for holding the coins by denomination in unstacked piles by denomination, the dispensing hoppers having respective exits positioned for dispensing to an individual receptacle having compartments for receiving and holding respective denominations;

a plurality of bulk coin storage receptacles positioned for receiving the coins from the sorting mechanism and holding the coins in unstacked piles by denomination for transfer to the dispensing hoppers;

coin transfer mechanisms for transferring coins from the bulk coin storage receptacle to the dispensing hoppers;

an input device for transferring inputs from a user to associate the user with a batch of coins being loaded into the machine from the individual receptacle and to associate the user with coins being dispensed

to the user in an individual receptacle having compartments for holding respective denominations; and

a controller electronically connected to the input device and to the sorter for calculating first totals for amounts of coins received through the intake area and associated with the user, the controller also being electrically connected to the dispensing hoppers for automatically dispensing coins to the individual receptacle associated with the user and having compartments for receiving and holding respective denominations without manual manipulation of the bulk coin storage receptacles and accumulating second totals for coins being dispensed, and for making available the first and second totals associated with the user for comparison; and

wherein the controller associates inputs from a plurality of users with cash balances of coins dispensed and received for respective users during their respective work shifts.

2. (Rejected-Appealed) The coin recycling machine of claim 1, wherein the controller also controls the coin transfer mechanisms for transferring coins from the bulk coin storage receptacle to the dispensing hoppers.

3. (Rejected-Appealed) The coin recycling machine of claim 2, wherein the controller has a plurality of control circuits one for each denomination, which control transfer of coins from a respective one of the bulk coin storage receptacle to a respective one of the dispensing hoppers.

4. (Rejected-Appealed) The coin recycling machine of claim 1, wherein each of the bulk coin storage receptacles has a capacity at least three times the capacity of one of the dispensing hoppers.

5. (Rejected-Appealed) The coin recycling machine of claim 4, and further, wherein each of the bulk coin storage receptacles has a capacity at least ten times the capacity of one of the dispensing hoppers.

6. (Rejected-Appealed) The coin recycling machine of claim 1, wherein said controller is able to total the coins being loaded into the machine in an input operation as well as counting of coins being dispensed in an output operation during a time interval in which the input operation is also being conducted.

7. (Rejected-Appealed) The coin recycling machine of claim 1, further comprising diverters positioned near exits from the bulk coin storage receptacles for directing coins either to the dispensing hoppers or to coin bags.

8. (Rejected-Appealed) The coin recycling machine of claim 9, wherein the bulk coin storage receptacles have lifting platforms for lifting coins from the receptacles to a predefined height for contact by the skimmer mechanisms.

9. (Rejected-Appealed) The coin recycling machine of claim 1, wherein the coin transfer mechanisms further comprise skimmer mechanisms mounted on the bulk coin storage receptacles for pushing coins on top of the unstacked piles from bulk coin storage receptacles to the dispensing hoppers.

10. (Withdrawn) The coin recycling machine of claim 1, wherein the bulk coin storage receptacles operate by gravity, and wherein the coin transfer mechanisms further comprise mechanisms which allow coins to gravity feed downward from the bulk coin storage receptacles to the first plurality of receptacles.

11. (Rejected-Appealed) The coin recycling machine of claim 1, the housing has a cash drawer receiving slot in a front side of the housing

that is configured to receive a cash drawer having multiple compartments; and

wherein the coins are dispensed into the multiple compartments of the cash drawer by denomination.

12. (Rejected-Appealed) The coin recycling machine of claim 1, wherein the controller includes memory for storing a plurality of user accounts with a balance per user of coins received and coins dispensed during a work shift.

13. (Rejected-Appealed) The coin recycling machine of claim 1, wherein:

the input device is a card reader input device electrically connected to the controller for transferring inputs from a plurality of users to the controller.

14. (Rejected-Appealed) The coin recycling machine of claim 1, wherein:

the input device is a touch screen input device electrically connected to the controller for transferring inputs from a plurality of users to the controller.

15. (Rejected-Appealed) The coin recycling machine of claim 1, wherein:

the input device is a personal computer electrically connected to the controller for transferring inputs from a plurality of users to the controller.

16. (Rejected-Appealed) The coin recycling machine of claim 1, further comprising a coin level sensor in each dispensing hopper and wherein the controller responds to a signal from the coin level sensor to actuate the coin transfer mechanisms to transfer coins from bulk coin storage receptacles to the dispensing hoppers.

17. (Rejected-Appealed) The coin recycling machine of claim 1, wherein the controller is responsive to denomination sensors associated

with the dispensing hoppers and is responsive to inputs from a user in a first operating cycle of the machine to cause the receptacles to dispense an amount of coins sorted by denomination and to store the dispensed amount of coins in memory in association with a user account number, the controller being responsive to input of a batch of coins and the user account number in a second cycle to count the coins received, and store the amount of coins received and the amount of coins dispensed for comparison to determine a net amount of cash associated with the user.

18. (Rejected-Appealed) A method of recycling coins, comprising:

dispensing coins by denomination from a plurality of dispensing hoppers in a machine to a user coin receptacle having compartments for receiving respective denominations and totaling amounts dispensed in relation to respective users;

loading batches of coins having a plurality of denominations into the machine from the user coin receptacle and totaling amounts of the batches of coins in relation to respective users;

receiving the coins that are fed into the machine and sorting said coins by denomination, counting said coins and directing said coins to a plurality of bulk coin storage receptacles according to denomination;

electronically controlling a plurality of mechanisms that transfer coins from said bulk coin storage receptacles by denomination to corresponding ones of said dispensing hoppers for dispensing to a respective user; and

comparing amounts of coins dispensed from the machine for the respective user with amounts of coins loaded into the machine by said respective user.

19. (Rejected-Appealed) The method of claim 18, in which the totaling of coins being loaded into the machine can be carried out

simultaneously with the counting of coins being dispensed in an output operation.

20. (Rejected-Appealed) The method of claim 18, further comprising diverting coins either to the dispensing hoppers or to coin bags.

21. (Rejected-Appealed) The method of claim 18, further comprising transferring coins from the bulk coins storage receptacles by lifting coins from the receptacles to a predefined height and rotationally skimming the coins into the dispensing hopper.

22. (Withdrawn) The method of claim 18, feeding the coins from bulk coin storage receptacles to the dispensing hoppers by gravity, and wherein the coin transfer mechanisms further comprise mechanisms which allow coins to gravity feed downward from the bulk coin storage receptacles to the dispensing hoppers.

23. (Rejected-Appealed) The method of claim 18, further comprising storing a plurality of user accounts with a balance per user of cash received and cash dispensed during a work shift.

24. (Rejected-Appealed) The method of claim 18, further comprising:

reading in identification inputs from a plurality of users; and

associating said identification inputs from a plurality of users with cash balances of cash dispensed and received for respective users during their respective work shifts.

25. (Rejected-Appealed) The method of claim 18, further comprising entering the user identification inputs with a touch screen input device.

26. (Rejected-Appealed) A method of recycling cash during a work shift, comprising:

responding to inputs from a user in a first operating cycle of a machine to cause an amount of coinage to be dispensed from a plurality of dispensing hoppers into a user coin receptacle having compartments for receiving respective denominations;

storing the amount of dispensed coinage in memory in association with a user account number, which is one of the inputs from the user;

responding to inputs from a user and a batch of coins put into the machine from the user coin receptacle in a second operating cycle of the machine to total the coinage put into the machine and to store the coinage in bulk coin storage receptacles by denomination;

comparing the amount of coinage received in the second operating cycle with the amount of coinage dispensed in the first operating cycle to determine a net amount of coinage associated with the user account number; and

electronically controlling a plurality of mechanisms that transfer coinage from the bulk storage receptacles to the dispensing hoppers when needed to maintain a predetermined level of coinage in the dispensing hoppers for dispensing to a user.

27. (Rejected-Appealed) The method of claim 26, further comprising responding to coins being input into the machine simultaneously with dispensing coins from the machine.

28. (Rejected-Appealed) The method of claim 26, further comprising:

reading in identification inputs from a plurality of users; and

associating said identification inputs from a plurality of users with cash balances of cash dispensed and received for respective users during their respective work shifts.

29. (Rejected-Appealed) The coin recycling machine of claim 11, wherein:

the controller includes a memory for storing a plurality of user accounts with a balance per user of coins received and coins dispensed during a work shift; and

the coin recycling machine further comprising a card reader input device electrically connected to the controller for transferring inputs from a plurality of users to the controller.

APPENDIX B

Factual Evidence in Application No. 10/821,004

Submitted as part of Appeal Brief.

(Declaration under 37 C.F.R. 1.130)

PATENT
Docket No. 1827.030
(formerly 180009.00004)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Adams
Appl. No.:	10/821,004
Filed:	April 8, 2004
For:	MACHINE AND METHOD FOR CASH RECYCLING AND CASH SETTLEMENT
Art Unit:	3653
Examiner:	J. Shapiro

DECLARATION UNDER 37 C.F.R. 1.130

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

1. The undersigned is the attorney of record in this application.

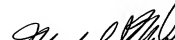
2. On April 1, 2008, the Examiner in this application issued an Office Action in which an obviousness double patenting rejection was made over U.S. Pat. No. 6,983,836.

3. The present application is a continuation-in-part claiming the benefit of the filing date of U.S. Pat. No. 6,983,836 for all commonly disclosed subject matter.

4. Both the present application and U.S. Pat. No. 6,983,836 have at all relevant times been owned 100% by De La Rue Cash Systems, Inc. of Watertown, Wisconsin by virtue of an assignment from all of the inventors recorded at Reel 013963, Frame 0530 in Application No. 10/411,561, effective on April 10, 2003, which Application issued as U.S. Pat. No. 6,983,836, and by virtue of an assignment of the present application from all of the inventors herein recorded at Reel 015627/ Frame 0694 effective July 29, 2004.

5. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardized the validity of the application or any patent issued thereon.

Date: July 28, 2005

By: 

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APPENDIX C

Related Proceedings in Application No. 10/821,004

Submitted as part of Appeal Brief.

Final action of December 24, 2008, in U.S. Pat. No. 10/896,472

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/896,472	07/22/2004	Robert L. Zwieg	1827.001 (180009.00007)	9104

23598 7590 12/24/2008

BOYLE FREDRICKSON S.C.
840 North Plankinton Avenue
MILWAUKEE, WI 53203

EXAMINER	
SHAPIRO, JEFFERY A	

ART UNIT	PAPER NUMBER
3653	

NOTIFICATION DATE	DELIVERY MODE
12/24/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@boylefred.com

Office Action Summary	Application No.	Applicant(s)	
	10/896,472	ZWIEG ET AL.	
	Examiner	Art Unit	
	JEFFREY A. SHAPIRO	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-47* is/are pending in the application.

4a) Of the above claim(s) *45-47* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 38 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 38 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Nowhere in the specification or disclosure is the cash handling machine described as not dispensing/vending pre-priced products.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 25-36 and 38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US 6,318,537 B1).

Regarding **Claims 25 and 41-44**, Jones discloses a coin recycling machine (10) that dispenses a receipt to a user, as mentioned at col. 5, lines 6-9, has a housing, as illustrated in figures 1 and 2, an intake area (14), a sorting mechanism (32, 250), as illustrated in figures 2, 20 and 21 and discussed at col. 18, lines 50-67.

Jones further discloses a plurality of coin receptacle entrances (276), as illustrated at figures 13a, b, c, 14a, b, that lead to a plurality of dispensing hoppers/coin receptacles (252a-f), as illustrated at figure 13c and discussed at col. 14, lines 10-12.

Jones discloses that the plural entrances (276), which are part of assembly (258 and 258a), illustrated at figures 14b and 13a, are illustrated in figure 13a and arranged in two rows with each row having at least four receptacle entrances. Note figure 13b, reproduced below.

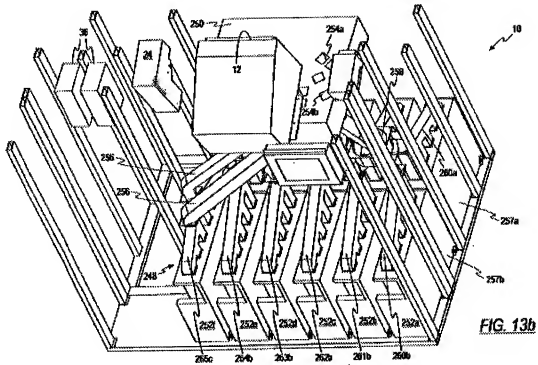

FIG. 13b

As can be seen in figure 13b, there are two rows of receptacles (252) and two rows of receptacle entrances (280), as looking in a direction from the right-hand side of the figure. Receptacle entrance (280) is better illustrated in figure 15. Note that each set of receptacle entrances (276), which are part of assembly (258) are located also in two or more rows as looking from a direction from the lower or bottom portion of figure 13b. Note that each assembly (258) diverts coins into one of four sub-manifolds (260).

Jones further discloses at least three pivotable diverter chutes (270) that receive coins from the stationary chutes (254). Note that chutes (270), as part of assembly

(258), are disposed at a point located between four receptacles (252) with access to the entrances to four of the manifolds (260) that lead into the receptacles (252).

Regarding at least two of the pivotable coin diverter chutes (270) being pivotable to access only two coin receptacle entrances, and at least one of the pivotable coin diverter chutes being pivotable to access three or more coin receptacle entrances without any of the pivotable coin diverter chutes accessing coin receptacle entrances accessed by the other ones of the pivotable coin diverter chutes, note that this language is considered intended use language and does not carry patentable weight. Nonetheless, since Jones' pivotable coin diverter chutes (270) pivot between four entrances (276), it would have been obvious to one of ordinary skill in the art to have caused any combination of diverter chutes to access any one of the four entrances (276) as is required by the receptacles used, the volume of coins processed, and the number of denominations processed. Note also figure 17, which has a manifold (330) as an alternative to manifold (260) that incorporates a chute (340) that accepts coins at inlet (332) and pivots to divert them to any one of receptacle entrances (334a-e) as illustrated in figure 17.

Note also that Jones, at col. 7, lines 35-48, states that the number of receptacles can vary.

Regarding **Claim 26**, note that it would have been obvious to one of ordinary skill in the art to have used four diverter chutes instead of three diverter chutes as needed due to volume of coins as well as the number of denominations processed. Note again

that the language found in lines 3-8 is considered intended use language and does not carry patentable weight.

Regarding **Claims 27, 29 and 31**, note that under MPEP 2115, the item worked on by the apparatus, in this case, the dollars, half-dollars, quarters, dimes, nickels and pennies do not limit the apparatus claim. This language is also considered intended use.

Regarding **Claim 28**, Jones discloses stationary chutes (256) illustrated in figure 13b, as well as chutes (282a-e) as shown in figure 15.

Regarding **Claims 30 and 32**, note that it would have been obvious to one of ordinary skill in the art to have placed a stationary chute such as (256) to lead to a coin diverter (258) which has one movable, pivotable diverter (270) which moves to align with any of four inlets (276), which each lead to a separate manifold (260) which is configured as manifold (330) with pivoting chute (336) that pivots to any of five inlets (334a-e) as required depending upon the volume and/or the number of denominations of coins processed. Note also that the language of this claim is considered intended use language that does not carry patentable weight.

Regarding **Claims 33 and 36**, Jones discloses a rigid support in the form of frames and a housing as illustrated in figures 1, 2, 8 and 13b, for example. As can be seen from the figures, particularly figure 8, the housing encompasses the entire sorting mechanism with chutes and diverters and has an access door.

Regarding **Claim 34**, note again that receptacles (252) are located below receptacle entrances, as illustrated in figures 13a and b.

Regarding **Claim 35**, Jones discloses coin receptacles (394) with bag holders in the form of bag clips (396), as illustrated in figure 19 and discussed at col. 18, lines 16-23.

Regarding **Claim 38**, pre-priced products are not vended by Jones apparatus.

Regarding **Claim 39**, Jones' machine is a self-service machine.

Regarding **Claim 40**, Jones discloses a controller (39), an input device and a screen display embodied as touch screen (12).

7. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US 6,318,537 B1) in view of Bolen (US 5,190,133).

Jones discloses the system described above.

Regarding **Claim 37**, Jones does not expressly disclose, but Bolen discloses bulk bins/receptacles having windows (20) at figures 1 and 3 and at col. 3, lines 45-57, for the purpose of allowing a service person to view the level of contents therein.

At the time of the invention, one ordinarily skilled in the art would have found it obvious to incorporate windows in Jones' coin receptacles, as taught by Bolen for the purpose of allowing a service person to view the level of contents inside each bin.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 25-44 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-18 of U.S. Patent No. 6,983,836 in view of Harris U.S. Patent No. 5,067,928.

Adams discloses a cash input area, a sorting mechanism, plural receptacles, plural denomination sensors, and a controller. See Adams, Claim 1, for example.

Adams does not expressly disclose, but Harris discloses using a bulk coin receptacle, (70), to fill a dispensing hopper (56) when a low condition is sensed in the primary hopper, for the purpose of increasing the capacity of the machine, thereby reducing the need to replenish the machine and the cost of labor as well as reducing machine downtime. See Harris at col. 1, line 61-col. 2, line 35, which describes the problem of dispensing hopper depletion which causes machine downtime. Note also that Harris discloses at col. 3, lines 10-33 that a set of sensors detect the levels of both the bulk coin receptacle and the dispensing hopper.

Such frequent refilling requires extra labor than a machine which reduces refilling.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have added a bulk coin receptacle and associated transfer mechanism to each of Adams' dispensing hoppers (402a-f), as taught by Harris, for the purpose of increasing coin storage capacity, thereby reducing machine downtime and labor associated with servicing the coin machine.

10. Claims 25-44 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-27 of copending Application No. 10/821,004. Although the conflicting claims are not identical, they are not patentably distinct from each other because the essence of Claims 25-44 are embodied in Claims 1-27 of the '004 application. The '004 application claims a coin recycling machine with a housing, an intake area for coins, a sorting mechanism, dispensing hoppers, bulk coin receptacles, as described in Claim 1, for example, and diverters, as described in Claim 7, for example.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

11. Applicant's arguments filed 9/5/08 have been fully considered but they are not persuasive.

Note also that the recent decision rendered in KSR International Co. v. Teleflex Inc., 550 U.S._, 82 USPQ2d 1385 (2007) forecloses the argument that a specific

teaching, suggestion or motivation is required to support a finding of obviousness. See recent Board decision Ex Parte Smith, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007) (citing KSR, 82 USPQ2d at 1396) (available at http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf).

"A combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1731, 82 USPQ2d at 1396.

"When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability." *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1731, 82 USPQ2d at 1396.

Applicant asserts on p. 10 last two paragraphs and p. 11, first two lines and first full paragraph, that there is sufficient description in the specification of the concept of a machine in which "pre-priced products are not vended and dispensed". Applicant appears to suggest that since machines that handle only cash processing handle a larger amount or volume of cash versus the cash processed in a vending machine, that one ordinarily skilled in the art would have recognized that pre-priced products are not vended or dispensed by Applicant's claimed device. However, again note that nowhere in Applicant's specification is there a mention of "pre-priced products" nor is there a mention of vending "pre-priced products". Additionally, see MPEP 2173.05(i) which states in the third paragraph, lines 11-15 that [a]ny claim containing a negative limitation

which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement.

Regarding The double patenting rejection over the '004 application and Harris, note that the recitations regarding Claims 2, 8, 9, 16 and 21 were placed in the rejection in error and have been removed. Nonetheless, Applicant's Claims are still considered to read on the combination of the '004 Application and Harris.

Note also that Claims 25-40 are apparatus claims. Therefore, since recycling the coins is considered intended use and under MPEP 2115, the item worked upon does not act to limit an apparatus claim, the fact that the coins are "recycled coins" does not limit Claims 25-40.

Regarding Method Claims 41-44, no recitation of recycled coins is mentioned. However, even if they were, Jones discloses recycling coins at col. 9, lines 2-6 and 33-39. Note also that Jones' device "collects coins".

Further regarding Jones, Applicant states that Jones' diver chutes (270) do not pivot. The word pivot in the form of a verb is defined in the Merriam-Webster's Collegiate Dictionary, 10th edition, at p. 887, as "to turn on or as a pivot". A "pivot" in the form of a noun, is defined as "a shaft or pin on which something turns."

Applicant's claim language as exemplified by Claim 25, line 21, states "at least three pivotable coin diverter chutes". The word "pivotable" is related to the verb "pivot" and essentially means capable of pivoting about a turning point, i.e., shaft or pin. Therefore, since Jones' chutes (270) pivot, i.e., "rotate" about center inside collars (272) and access at least three receptacle entrances (276). It is considered a matter of

design choice as to how many receptacle entrances the pivotable chute (270) accesses, i.e., two or three or more or less, as based upon the required volume of coins or types of coins sorted into how ever many receptacles. It would have been predictably apparent to one of ordinary skill to include as many receptacle entrances as receptacles.

Applicant at p. 15 of the response, line 2, refers to the pivotable chutes as being required to "overlap". However, Applicant's Claim 25 does not recite this limitation and Claim 26 includes it as a negative limitation.

Nonetheless, as seen in figure 13c, Jones' coin chutes (270) appear to "overlap" the coin chutes of other chutes (270) the entrance extensions labeled by Applicant at p. 15 of the response as "coin flows" (1 and 2). Each coin flow can be construed as an extension of the chute from which it flows. Thus, since the coin flows (1 and 2) connect to receptacle through central chute (262b), it is considered that the two chutes (270) overlap.

Regarding to Claim 41, the term "compartment" is considered a relative term. Jones' housing can be construed to enclose all of the receptacles (251). See also Jones' figure 22a, which illustrates ten (10) receptacles (251) enclosed within compartments (252a-252f). Again, it is considered a matter of design choice as to how many receptacles to include within a compartment (252a-252f) as based upon the volume of coins required to be stored.

Note also that Jones' structure, as described with respect to Claims 25-40, teaches and suggests the performing of the method as claimed.

Conclusion

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY A. SHAPIRO whose telephone number is (571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey A. Shapiro/
Examiner, Art Unit 3653

December 19, 2008